



*BUILDING KNOWLEDGE TO INFORM POLICIES*



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## Punishment: Presenting after lunch

“..the worst time of the day to give a presentation is about 45 minutes after lunch.” . . or right now!!





# Equity and Universal Coverage

“Universal coverage implies that financing and organizational arrangements are sufficient to cover the entire population, removing ability to pay as a barrier to accessing health services and protecting people from financial risk, while providing additional support to meet equity goals and implement health promoting activities.” PHC 2007



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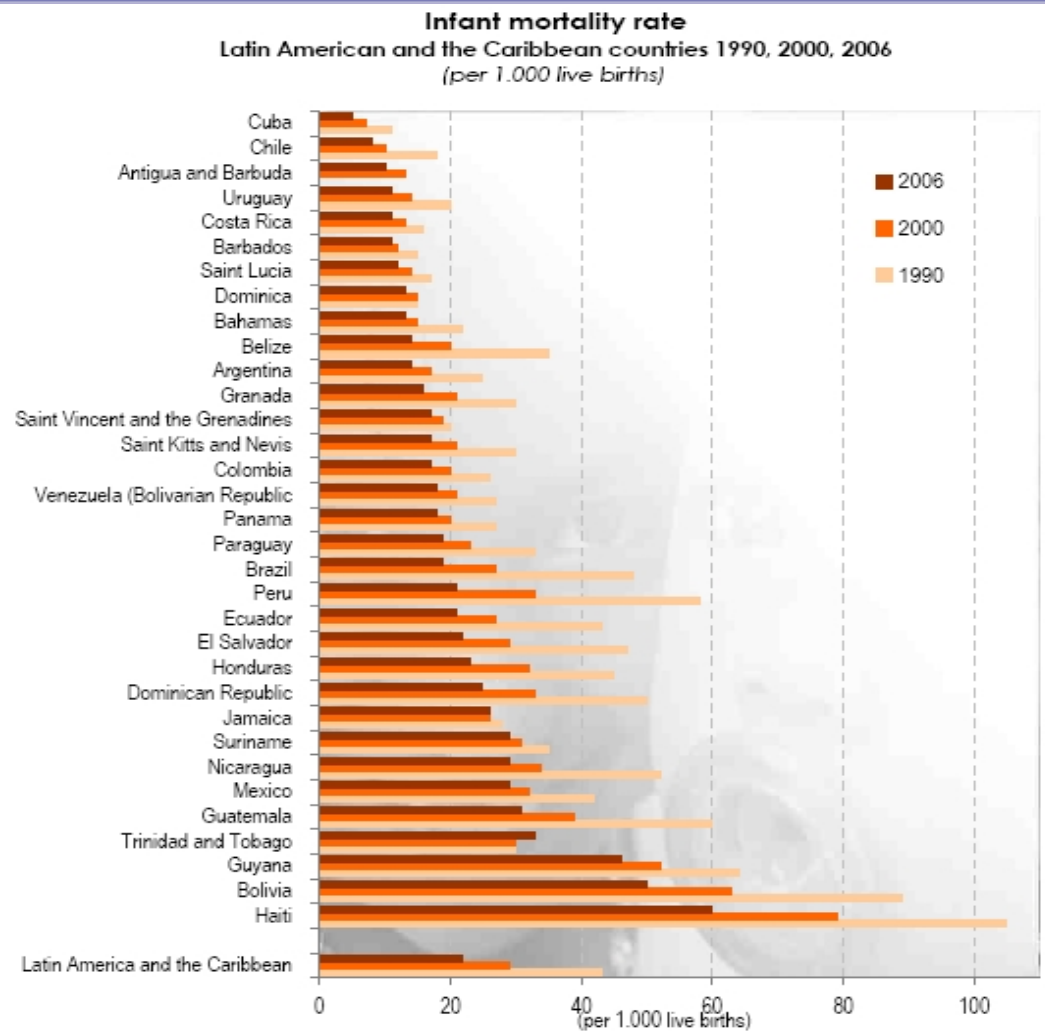
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# Equity and Universal Coverage

- Health systems can modify the negative effects of socioeconomic inequalities, reduce the burden of disease on the poor, contribute to poverty reduction; but it can also play a role in increasing inequalities and exclusion;
- Reducing/eliminating inequity in health and health care is a major objective of many health systems in the Region and key to achieve Universal Health Coverage.

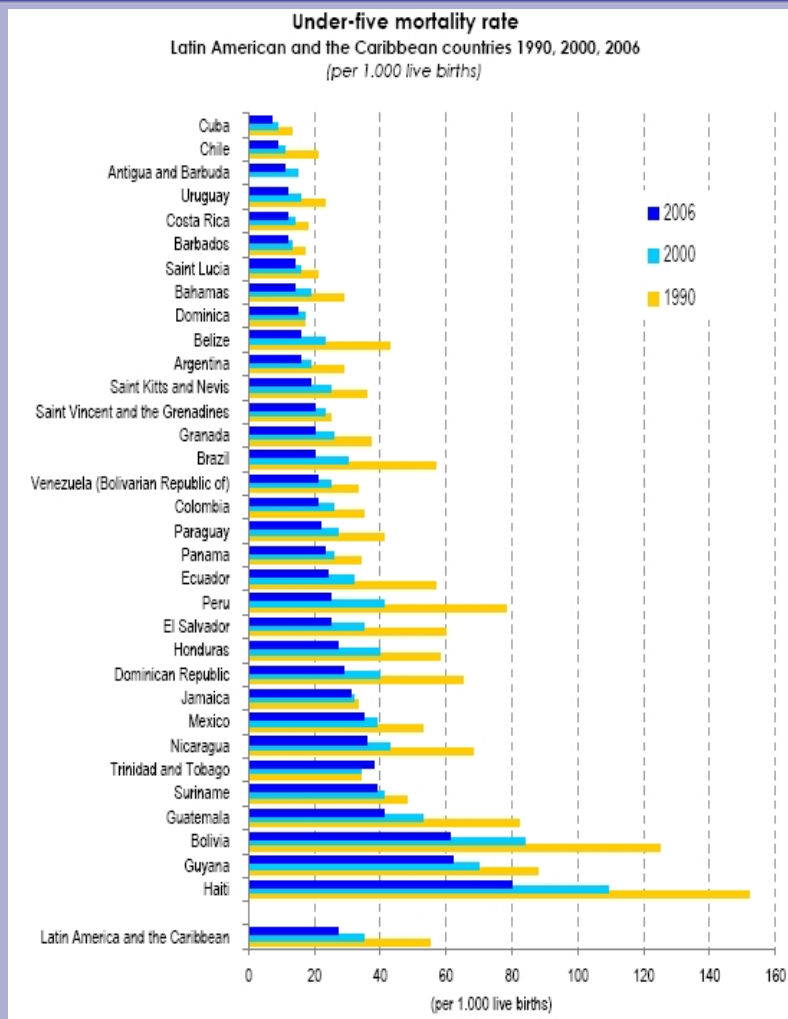
# Inequities in LAC



Source: ECLAC on the basis of UNICEF, United Nations Children's Fund . On-line database: Monitoring the Situation of Children and Women. [www.childinfo.org](http://www.childinfo.org). Information download: August, 2008.

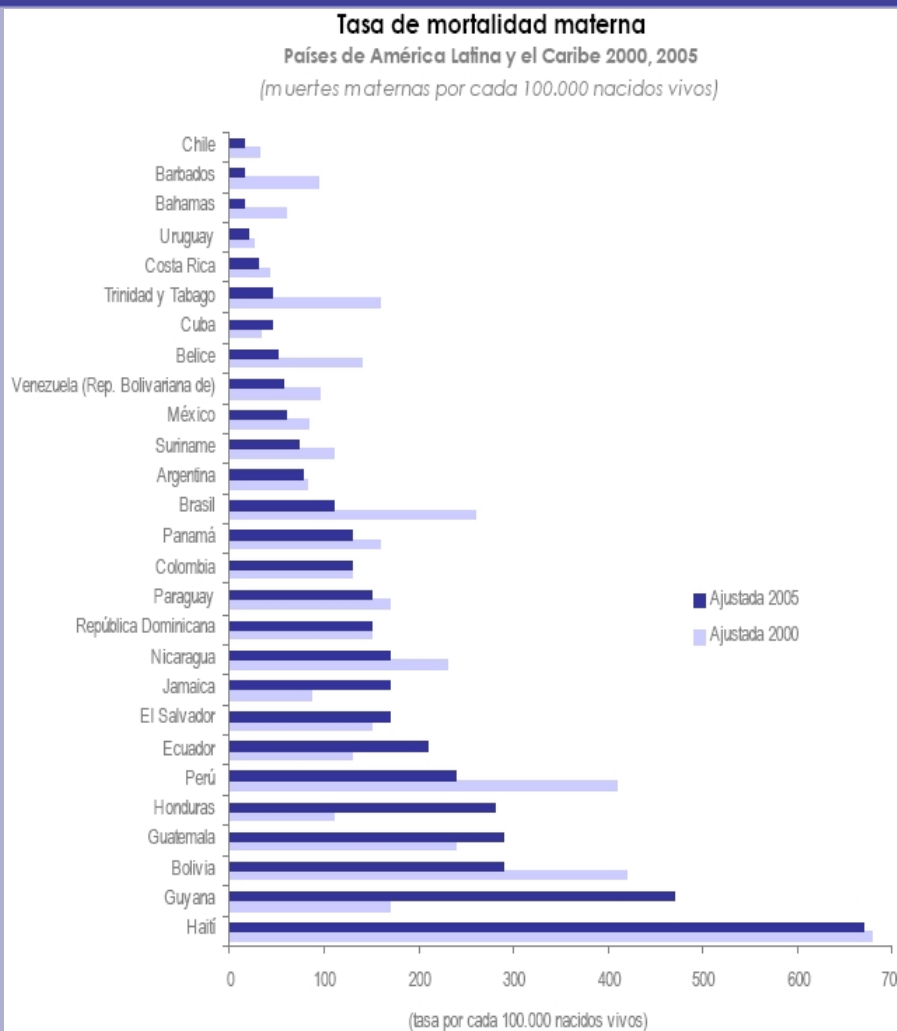


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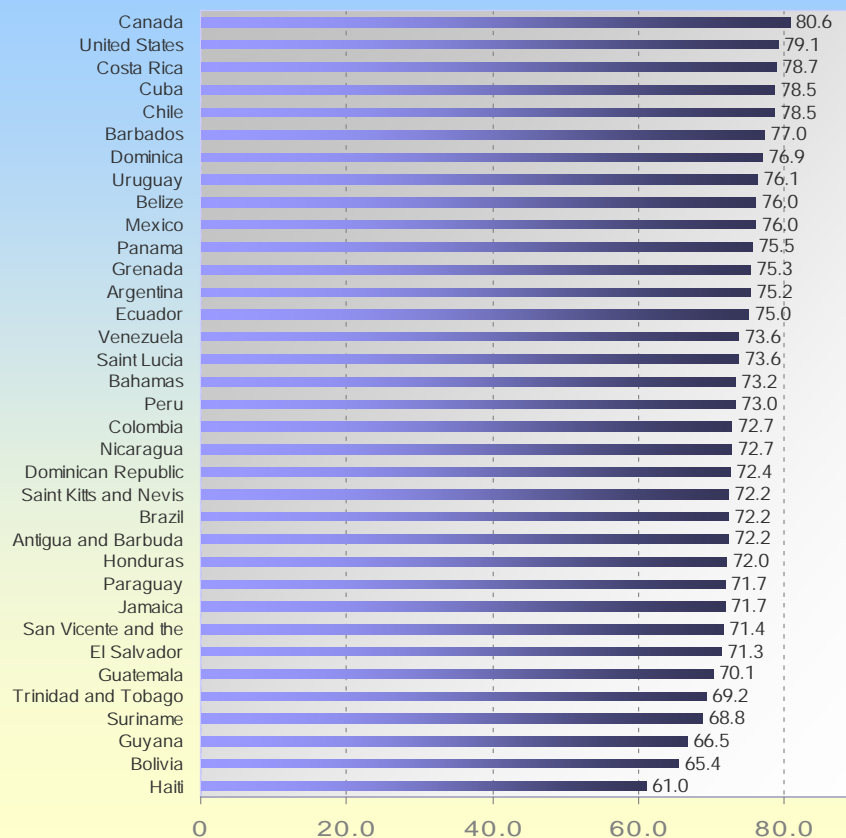
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# Inequities in LAC

Life expectancy at birth  
in the Americas, 2007



Source: Almeida, G. based on data available on line from the United Nations Development Program, HDI trends and indicators (1980-2007).



# Inequity in LAC



## Brazil, 2008

- Population: 192,000,000
- Poor: 48,000,000
- Indigents: 17,000,000



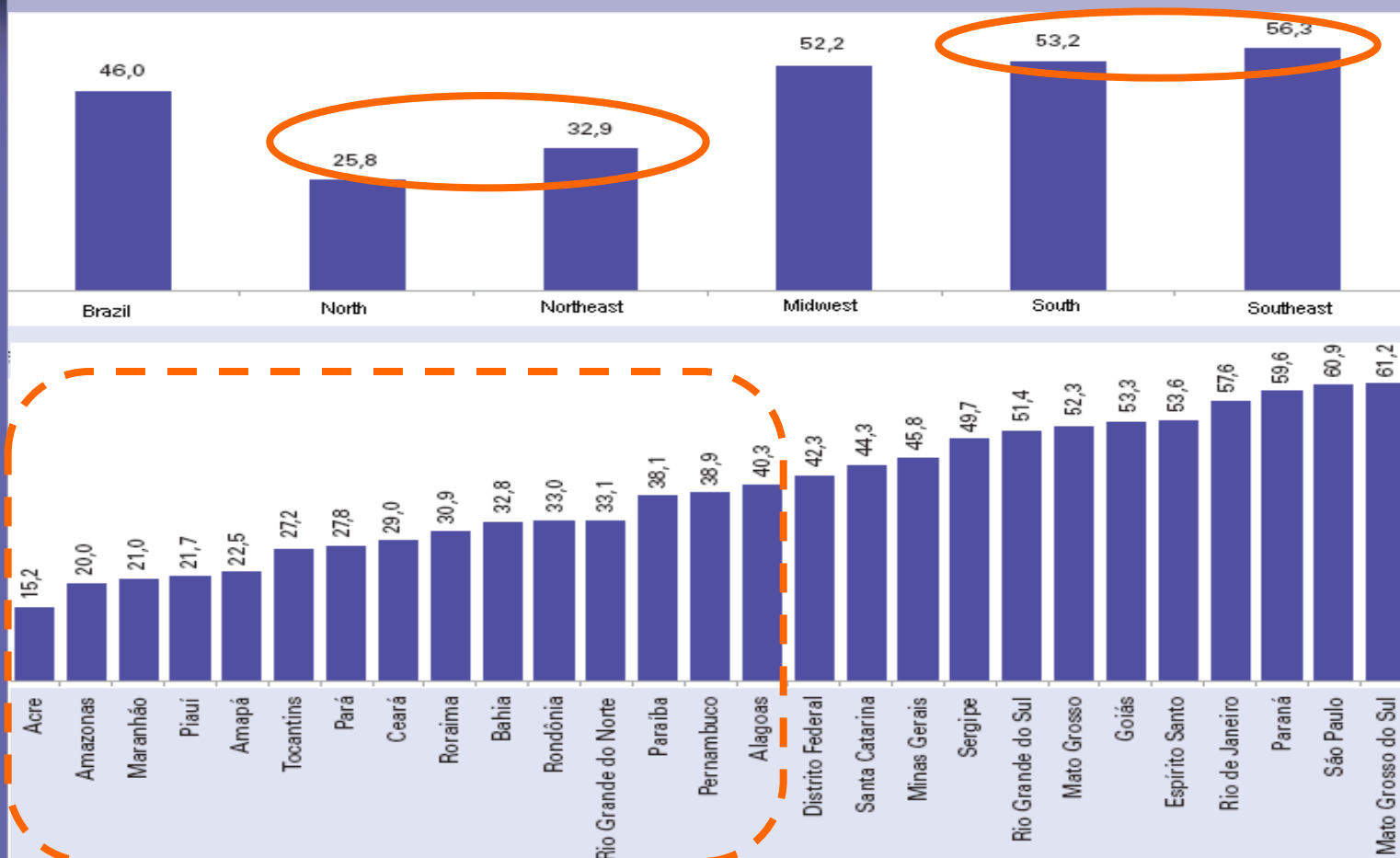
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# Inequity in LAC

Percentage of mothers with the recommended six or more prenatal visits, by region and state. Brazil.



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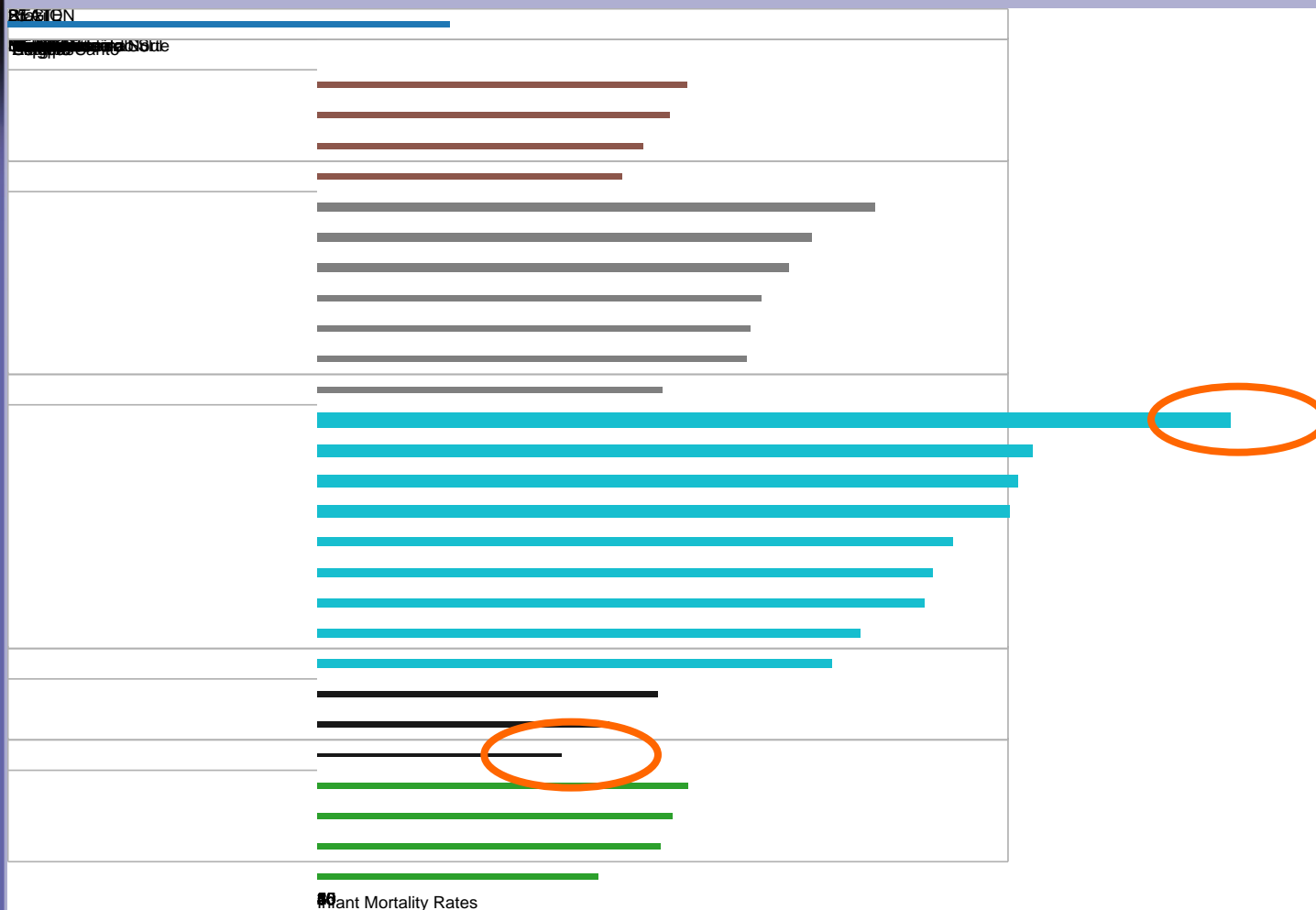
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Source: IBGE. (2002) Social Indicators. Brazil.



# Inequity in LAC

Infant Mortality  
(per 1,000 live births, by state). Brazil, 2006



# How to target inequity in health systems?

Measure, monitor, and understand socioeconomic inequalities in health!



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# EquiLAC



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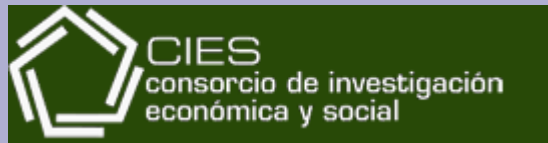


# Participating Countries

1. Brazil
2. Canada
3. Chile
4. Colombia
5. Jamaica
6. Peru
7. Mexico
8. Guatemala
9. Costa Rica



# Partners/Contributors





# Methods

Methods based on:

- O'Donnell O, van Doorslaer E, Wagstaff A, and Lindelow M. Analyzing Health Equity Using Household Survey Data
- Wagstaff A, Bilger M, Sajaia Z, Lokshin M. (2011) *Health equity and financial protection*.

Data analysis using Stata and ADePT software



# Health Equity Analysis – Brazil

Databases representative at national level

National Household Sample Surveys (1998, 2003 and 2008) and Household Budget Surveys (2002-2003 and 2008-2009) from the Brazilian Institute for Geography and Statistics (IBGE)



# Unified Health System - SUS

## Brazil is the only country

with more than 100 million people with an universal, public and free of charge Health System (1988 Constitution, SUS)



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# Unified Health System - SUS

## The magnitude of SUS

3.2 billion outpatient procedures /year

500 million medical appointments /year

1 million hospital admissions/year

Largest public organ transplants program

90% of vaccine market

30 million oncology procedures/year



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# Unified Health System - SUS

Health system combining public and private health care in consolidation since 1990's

Public health services, which provides care for most, is still insufficient in size and quality

Private health services complements public health services

Equity in health is a major concern in Brazil

Implementation of programs targeting low income population, based on an inclusive public health system





# Brazilian Health System

Population characteristics. Brazil, 1995-2010.

Sociodemographic indicators	1995	2000	2005	2010
Total population	161,848,162	174,425,387	185,986,964	194,946,470
Population ages 0-14 (% of total)	32.40%	29.52%	27.51%	25.45%
Population ages 65 and above (% of total)	5.02%	5.55%	6.27%	7.00%
Population ages 80 and above (% of total)	0.90%	1.05%	1.22%	1.51%
Population growth (avg annual growth rate)	1.53%	1.44%	1.14%	0.88%
Population density (indiv per km <sup>2</sup> )	19.01	20.48	21.84	22.89
Fertility rate, total (births per woman)	2.50	2.36	2.07	1.83
Age dependency ratio (pop 0-14y & 65+y : pop 15-64y)	59.78%	54.02%	51.01%	48.05%
Rural population (% of total)	22.20%	18.80%	15.80%	13.50%

Source: Based on data from World Bank (2012).



# Brazilian Health System

Financing characteristics. Brazil, 1995-2010.

National health expenditure indicators	1995	2000	2005	2010
Total health expenditures per capita, US\$	316.36	265.19	387.27	990.39
Total health expenditures per capita, PPP	411.81	493.85	694.87	1,028.29
Total health expenditure (% of GDP)	6.65%	7.16%	8.17%	9.01%
Public expenditure on health (% of total health exp)	43.01%	40.30%	40.14%	47.02%
Private expenditure on health (% of total health exp)	56.99%	59.70%	59.86%	52.98%
Government health spending (% of GDP)	2.86%	2.89%	3.28%	4.24%
Government health spending per capita, US\$	136.08	106.88	155.45	465.67
Government health spending per capita, PPP	177.14	199.04	278.93	483.49
OOP payments (% of private expenditure on health)	67.98%	63.58%	62.77%	57.76%



# Inequalities in Health Outcomes

During the period 1998-2008

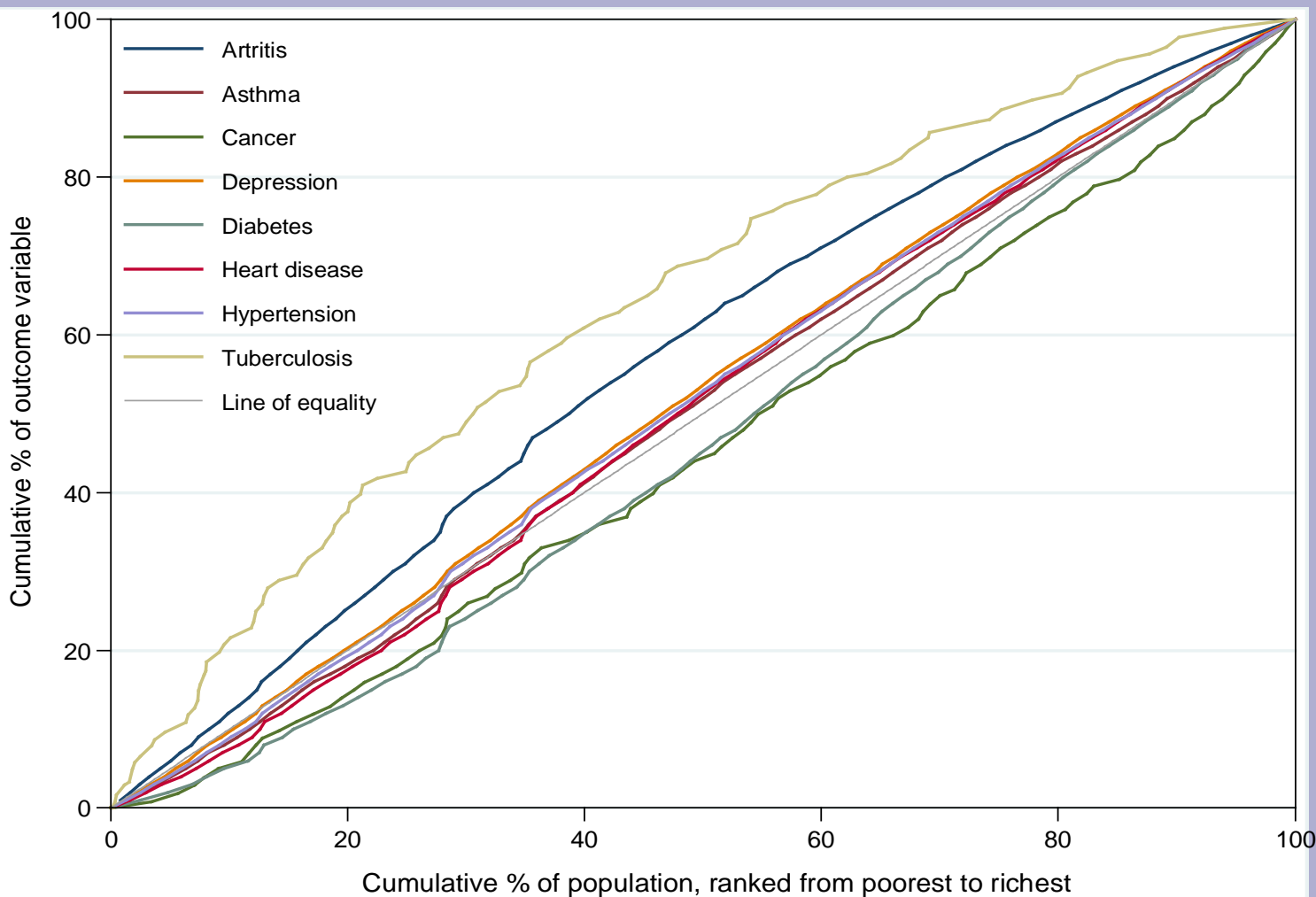
- Widespread increase in chronic diseases prevalence (especially diabetes and cancer) (pro-rich)
- Reduction in the concentration of diseases in the lowest income quintiles (pro-poor)
- Substantial differences remain between the rich and the poor in relation to self-assessed health status, physical limitations and tuberculosis (pro-poor)



# Inequalities in Risk Behavior

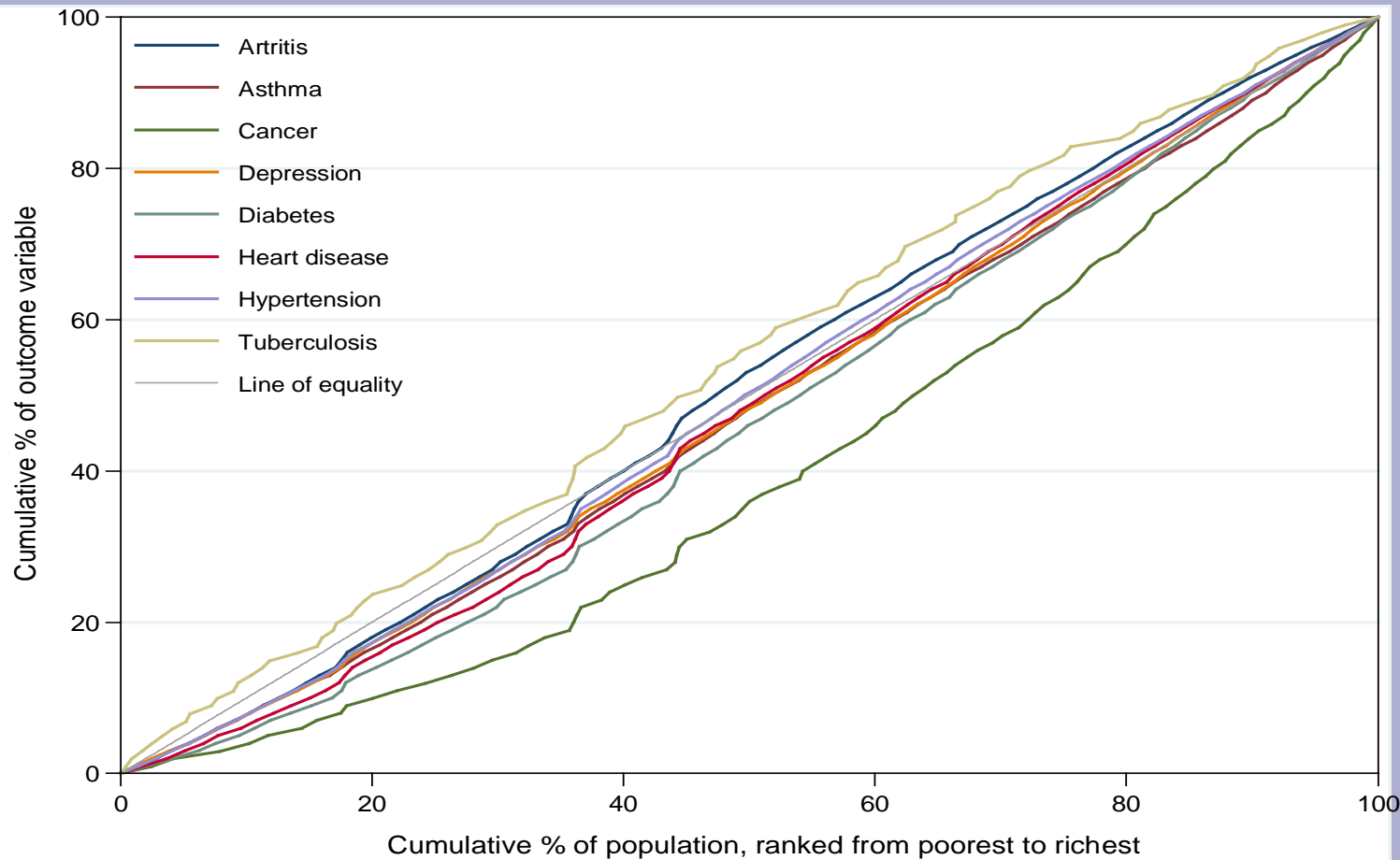
- Variable introduced in 2008: smoking
- Higher concentration of risky behavior among poorest quintiles and women

# Inequalities in health outcomes - prevalence of chronic conditions. Brazil, 1998.



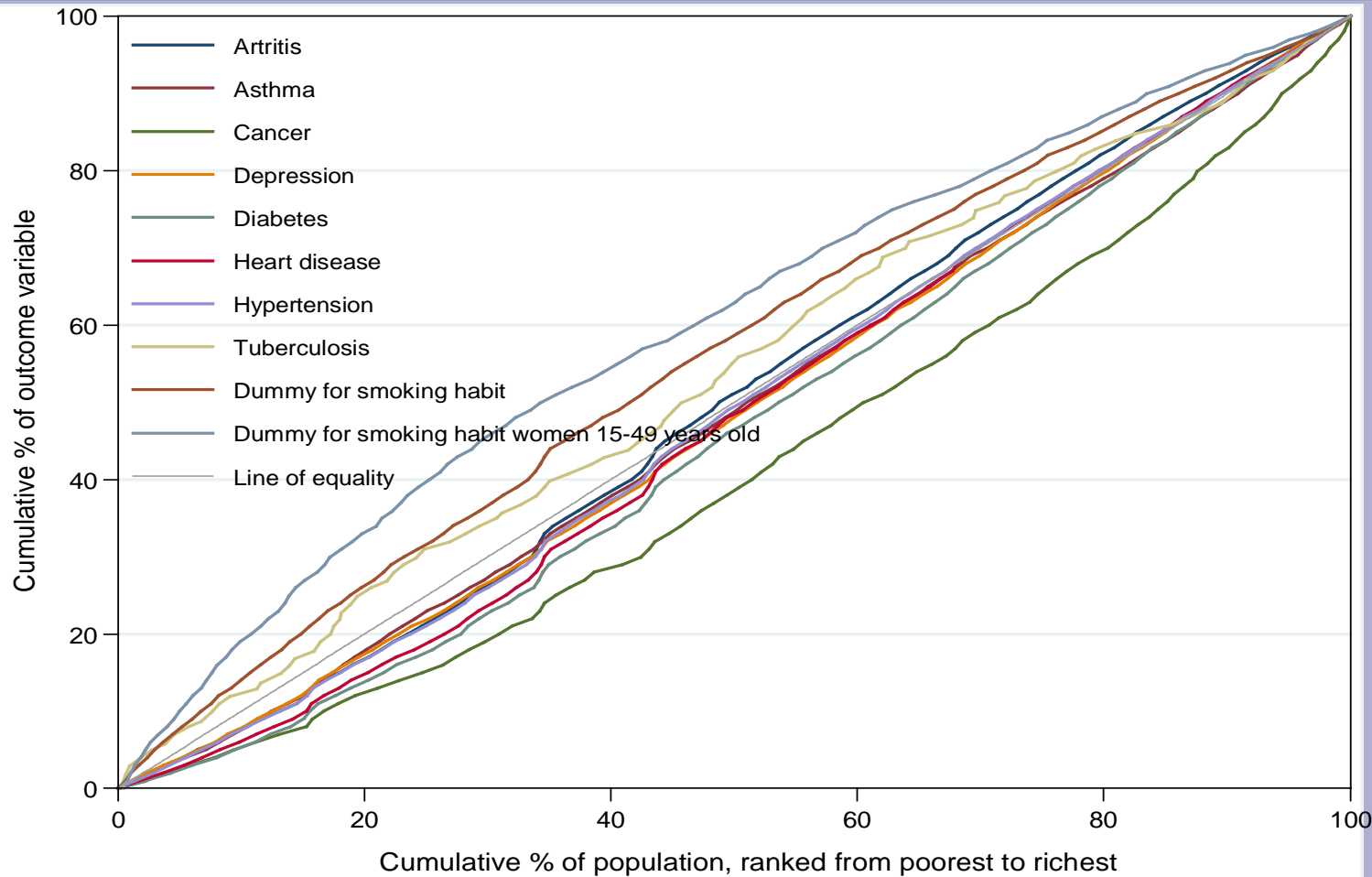
Source: Based on data from IBGE (1999).

# Inequalities in health outcomes - prevalence of chronic conditions. Brazil, 2003.



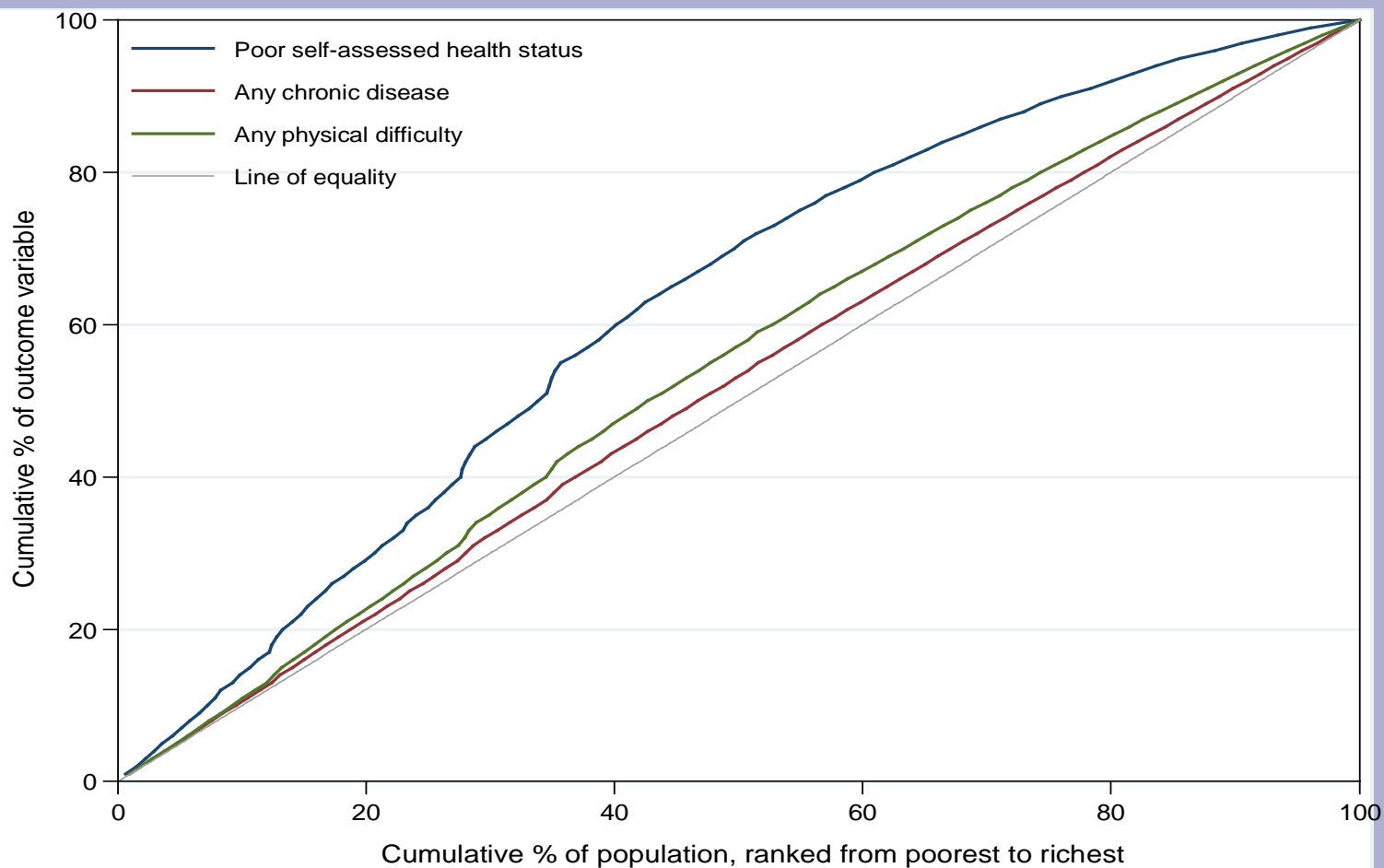


# Inequalities in health outcomes - prevalence of chronic conditions and risk behavior. Brazil, 2008.



Source: Based on data from IBGE (2009).

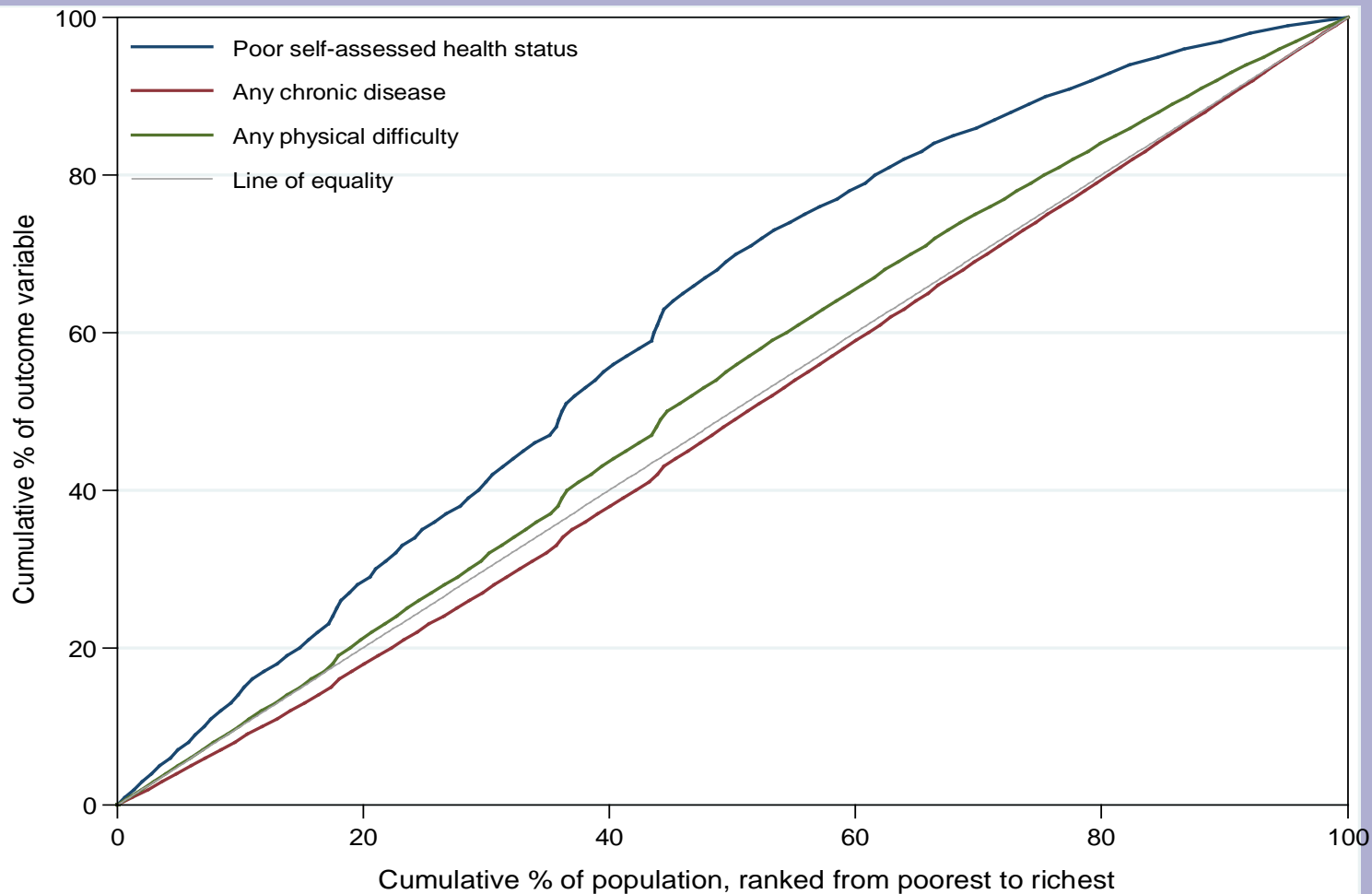
# Inequalities in health outcomes - prevalence of chronic conditions. Brazil, 1998.



Source: Based on data from IBGE (1999).

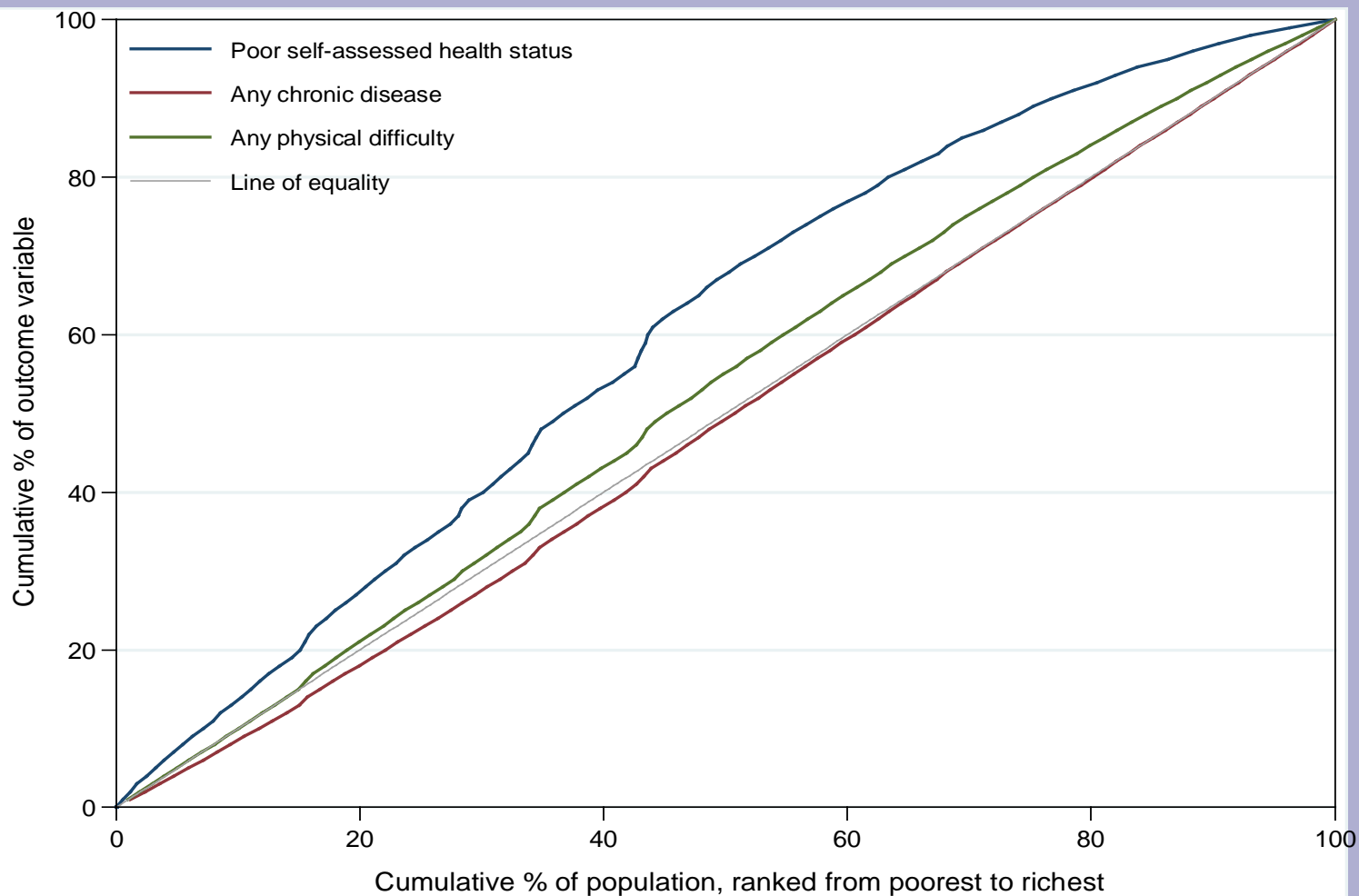


# Inequalities in health outcomes - prevalence of chronic conditions. Brazil, 2003.



Source: Based on data from IBGE (2004b).

# Inequalities in health outcomes - prevalence of chronic conditions. Brazil, 2008.



Source: Based on data from IBGE (2009).



# Inequalities in Health Care Utilization

During the period 1998-2008

- Reduction in pro-rich concentration indexes of outpatient care and dentist visits (pro-rich)
- Reduction in pro-poor concentration indexes of inpatient care (pro-poor)
- Differences in utilization of public (pro-poor) and private health services (pro-rich)

In relation to preventive care (2003-2008):

- Reduction in concentration indexes for Cervical and breast cancer screening (pro-rich)

A hand with a yellow nail is pointing at a globe. The globe is covered with glowing blue and red lines, suggesting a network or data flow. The background is dark blue.

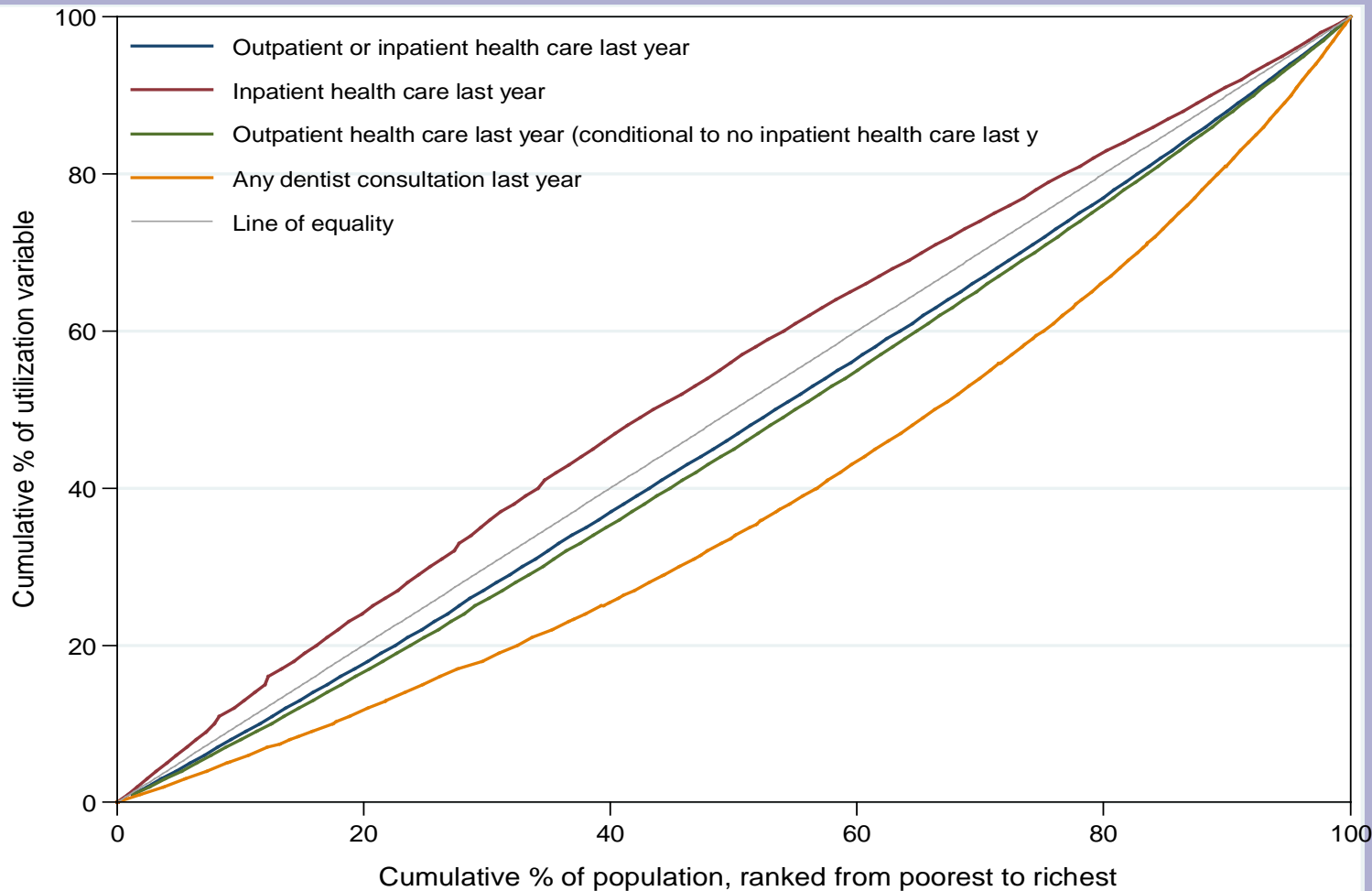
# Health Insurance Coverage

During the period 1998-2008:

- Concentration indexes for private health insurance have declined (pro-rich)
- No substantial changes in the proportion of individuals with private health insurance

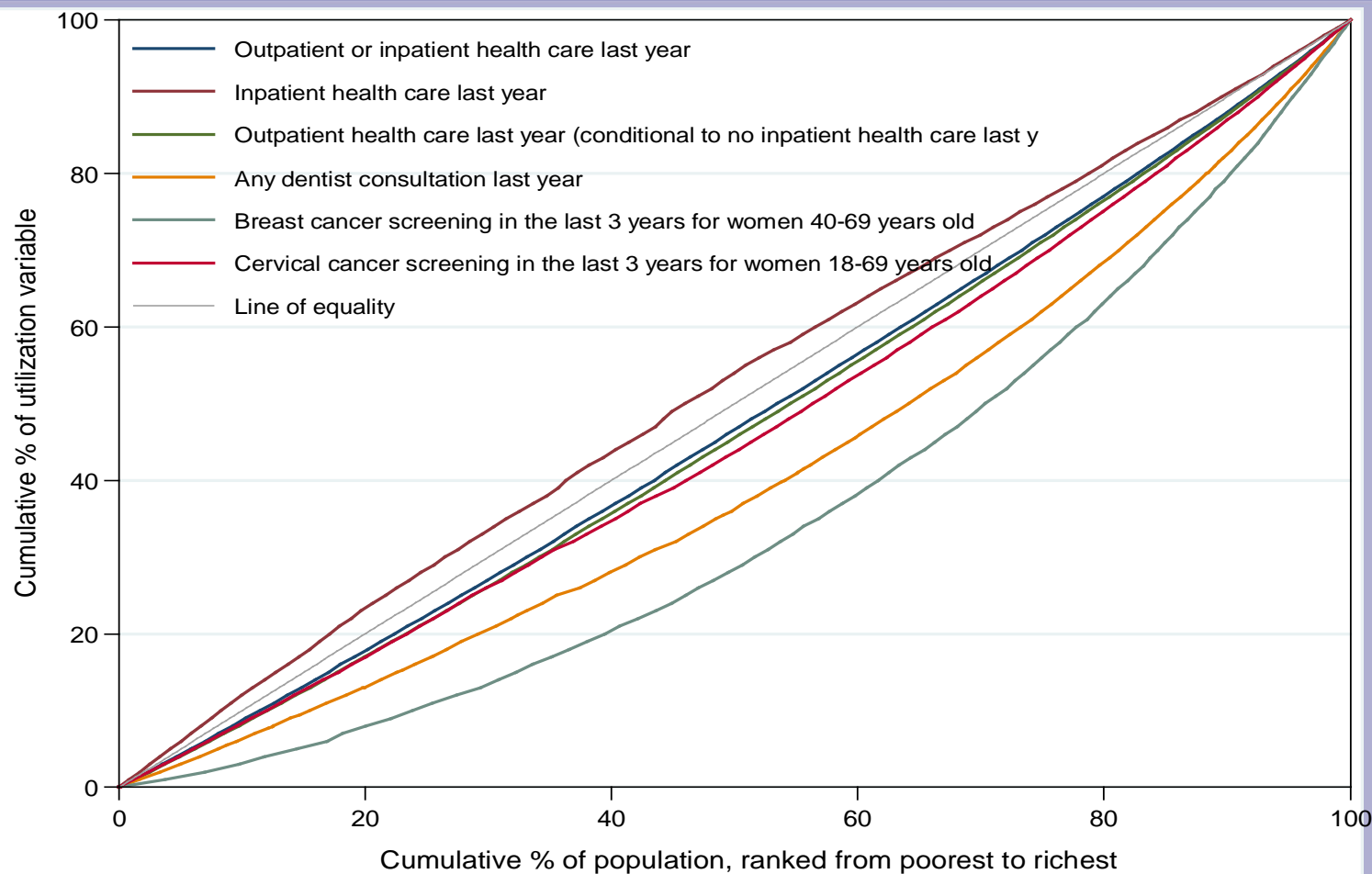


# Horizontal Inequity in health care utilization. Brazil, 1998.



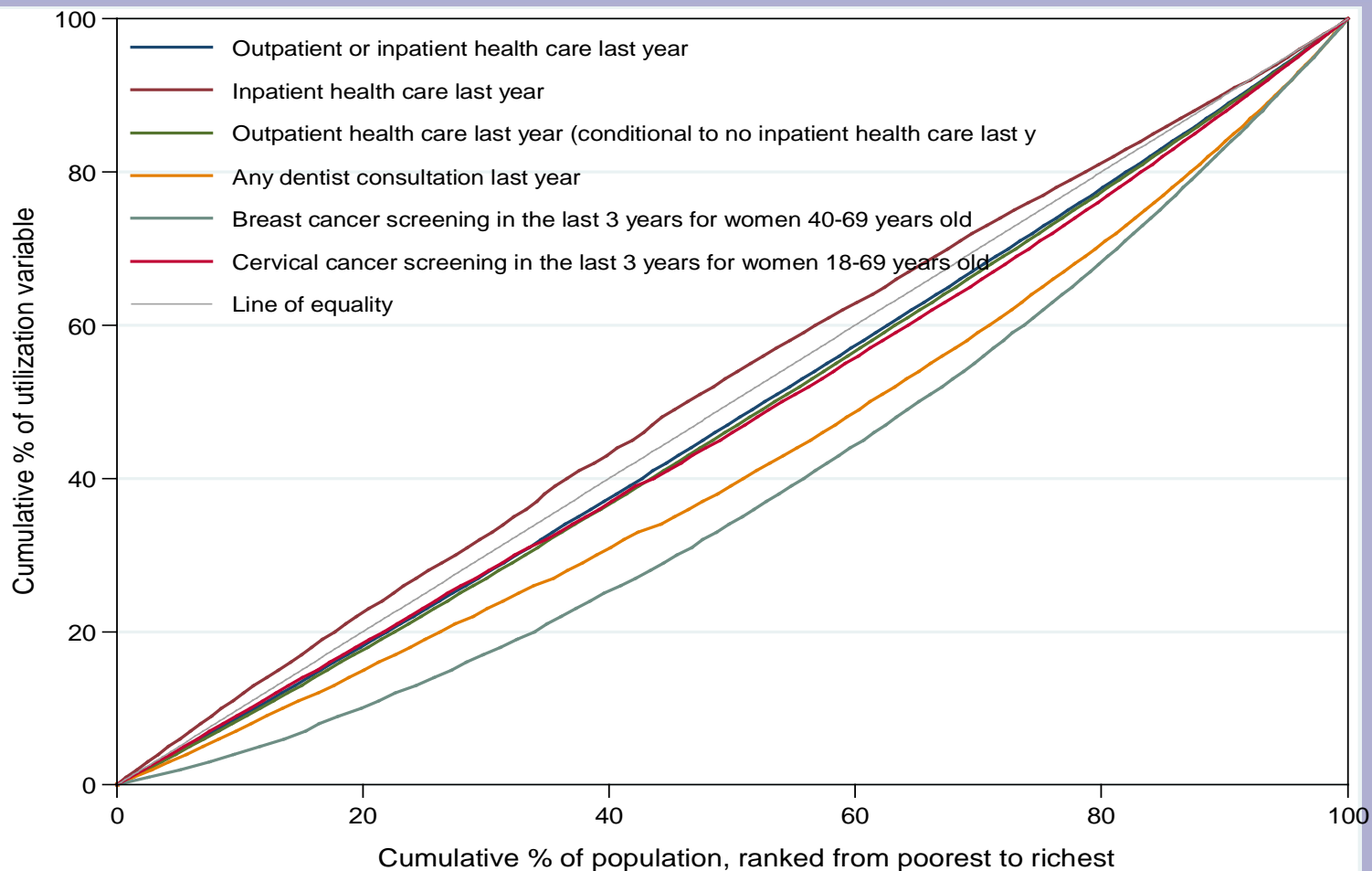
Source: Based on data from IBGE (1999).

# Horizontal Inequity in health care utilization. Brazil, 2003.



Source: Based on data from IBGE (2004b).

# Horizontal Inequity in health care utilization. Brazil, 2008.



Source: Based on data from IBGE (2009).



# Benefit Incidence Analysis

During the period 1998-2008

- Reduction in concentration indexes of outpatient and inpatient care in public facilities

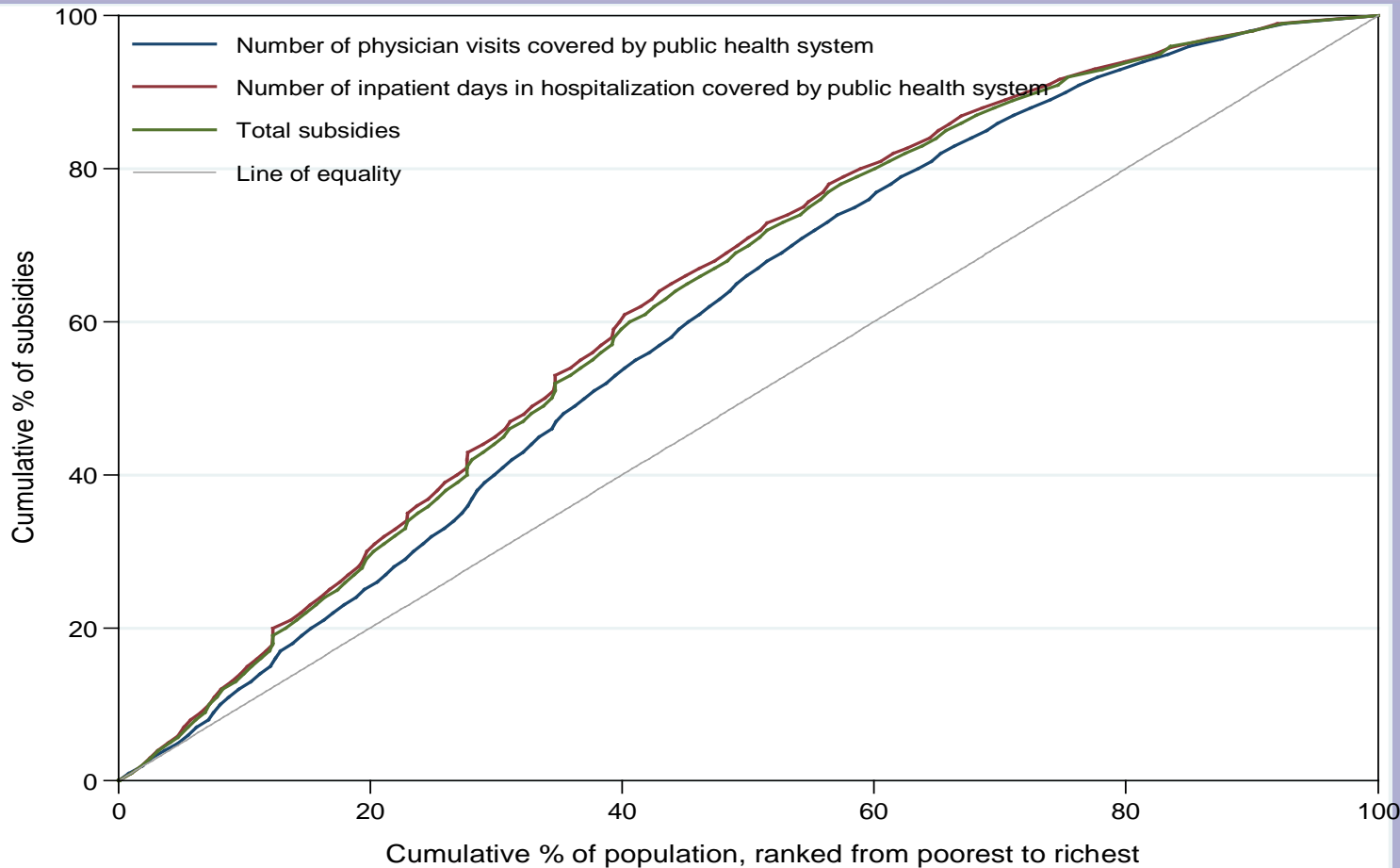
Proportion of subsidies

- Higher for inpatient in comparison to outpatient care
- Reduction in subsidies for lowest income quintiles during the period analyzed



# Benefit Incidence Analysis

Inequalities in health care subsidies. Brazil, 1998.

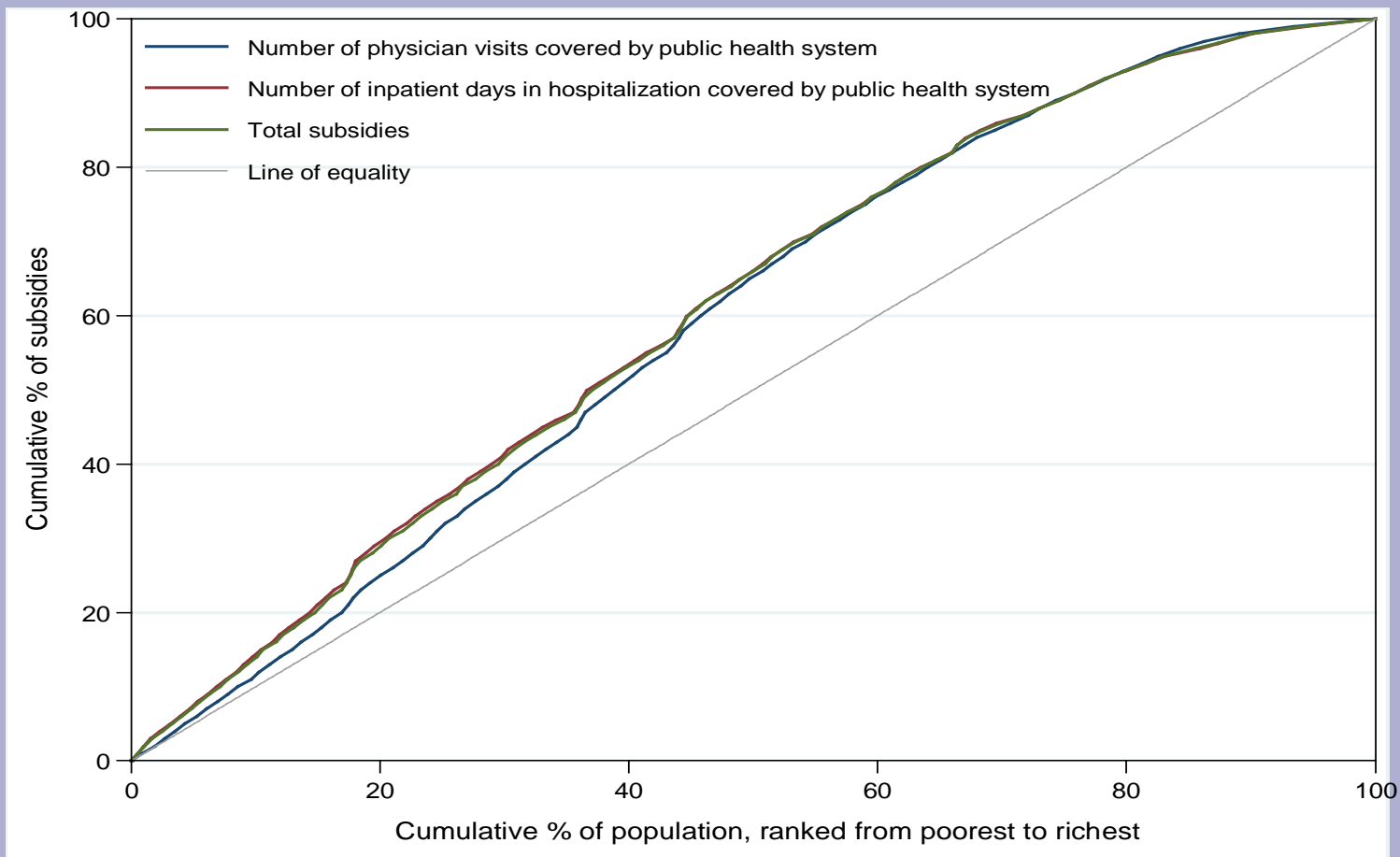






# Benefit Incidence Analysis

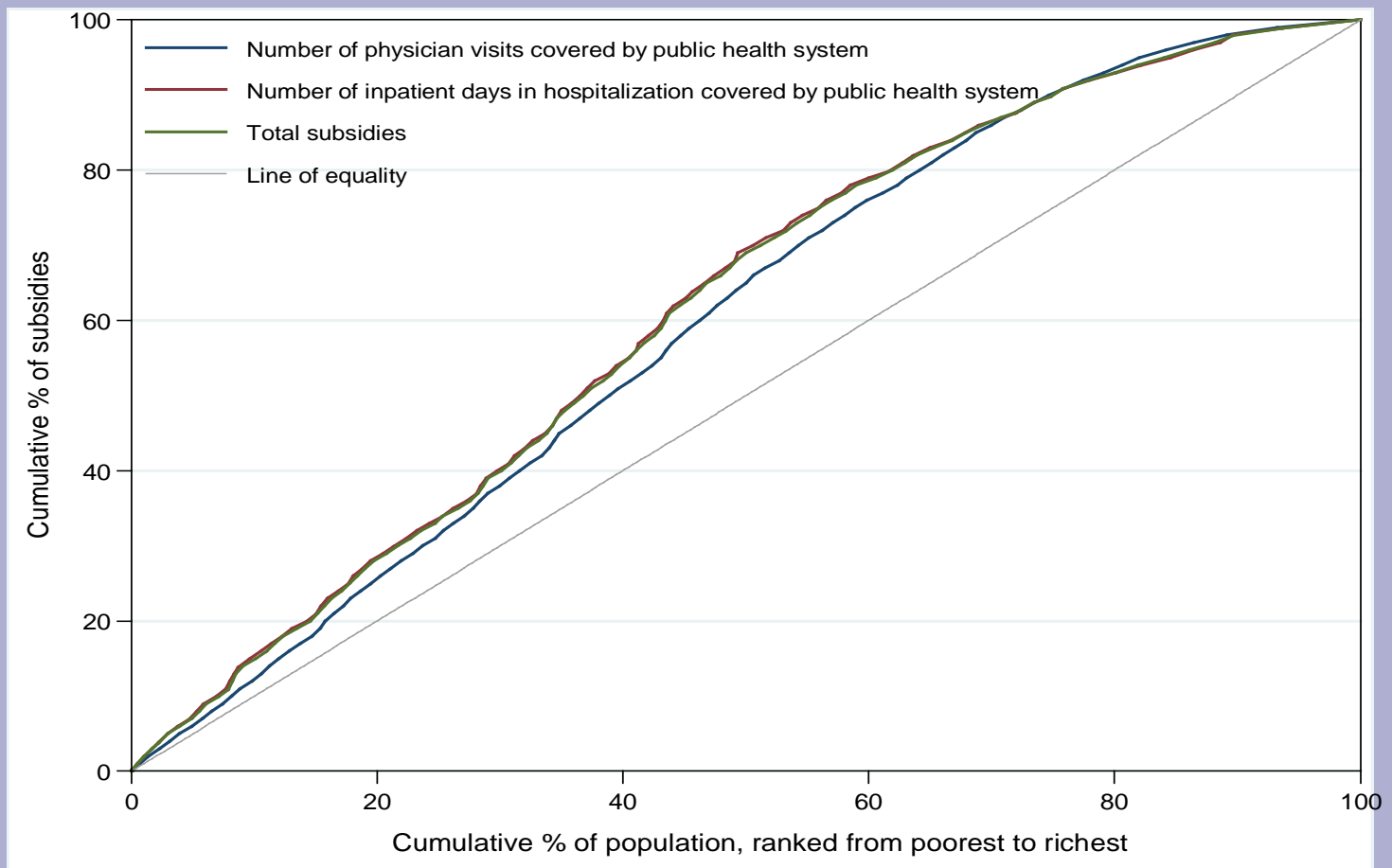
Inequalities in health care subsidies. Brazil, 2003.





# Benefit Incidence Analysis

## Inequalities in health care subsidies. Brazil, 2008.



Source: Based on data from IBGE (2009).



# Financial Protection

During the period 2003-2008

- Reduction in catastrophic health expenditures
- Reduction in poverty headcounts and normalized poverty gaps



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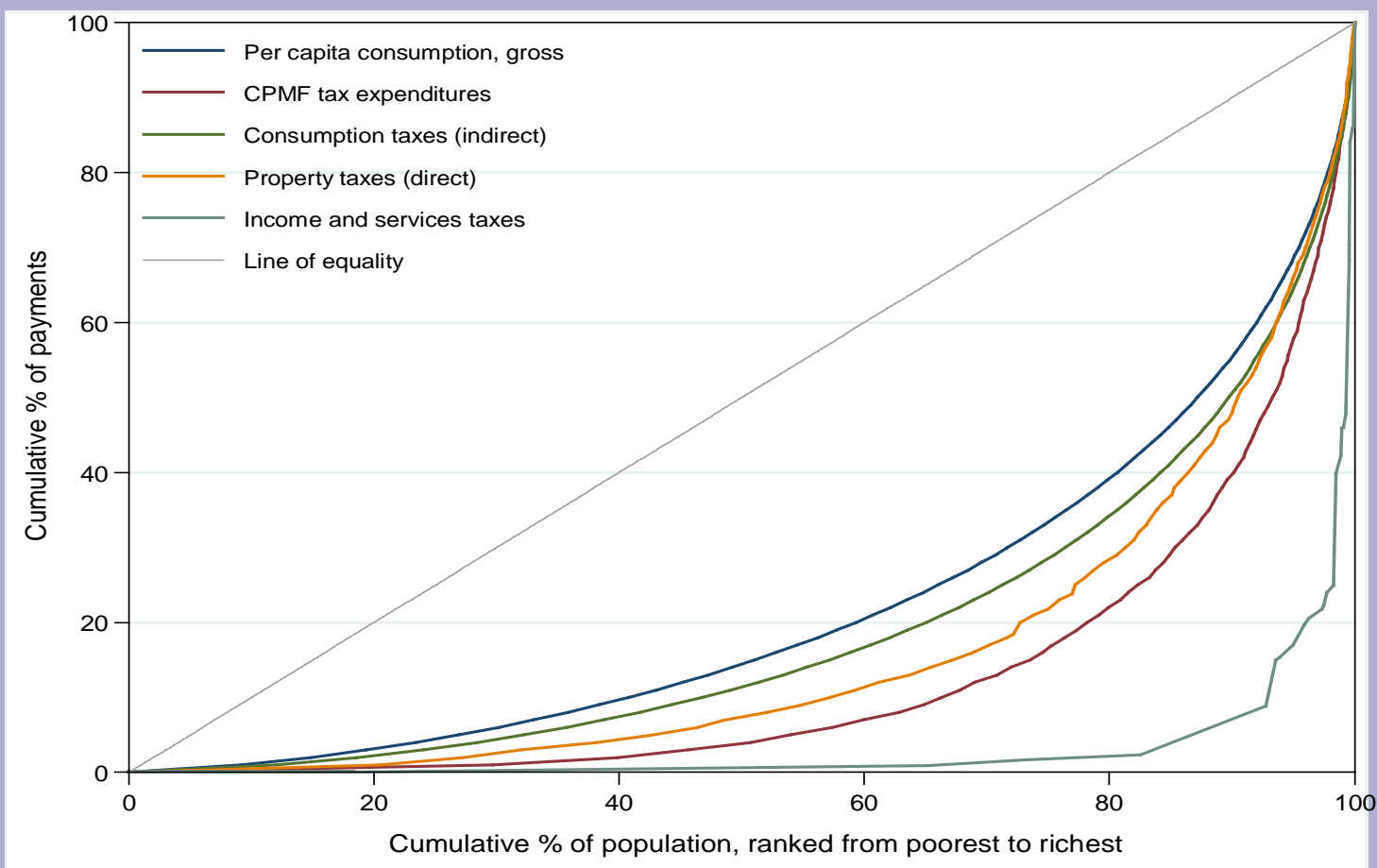
# Progressivity in Health Payment

During the period 2003-2008:

- Reduction in progressivity
  - ▶ Consumption taxes (indirect)
  - ▶ Property taxes (direct)
  - ▶ Voluntary health expenditures
- Increase in progressivity
  - ▶ Out-of-pocket health spending
- Elimination of contribution based on financial transactions (CPMF), initially created to fund public health services

# Progressivity in Health Payment

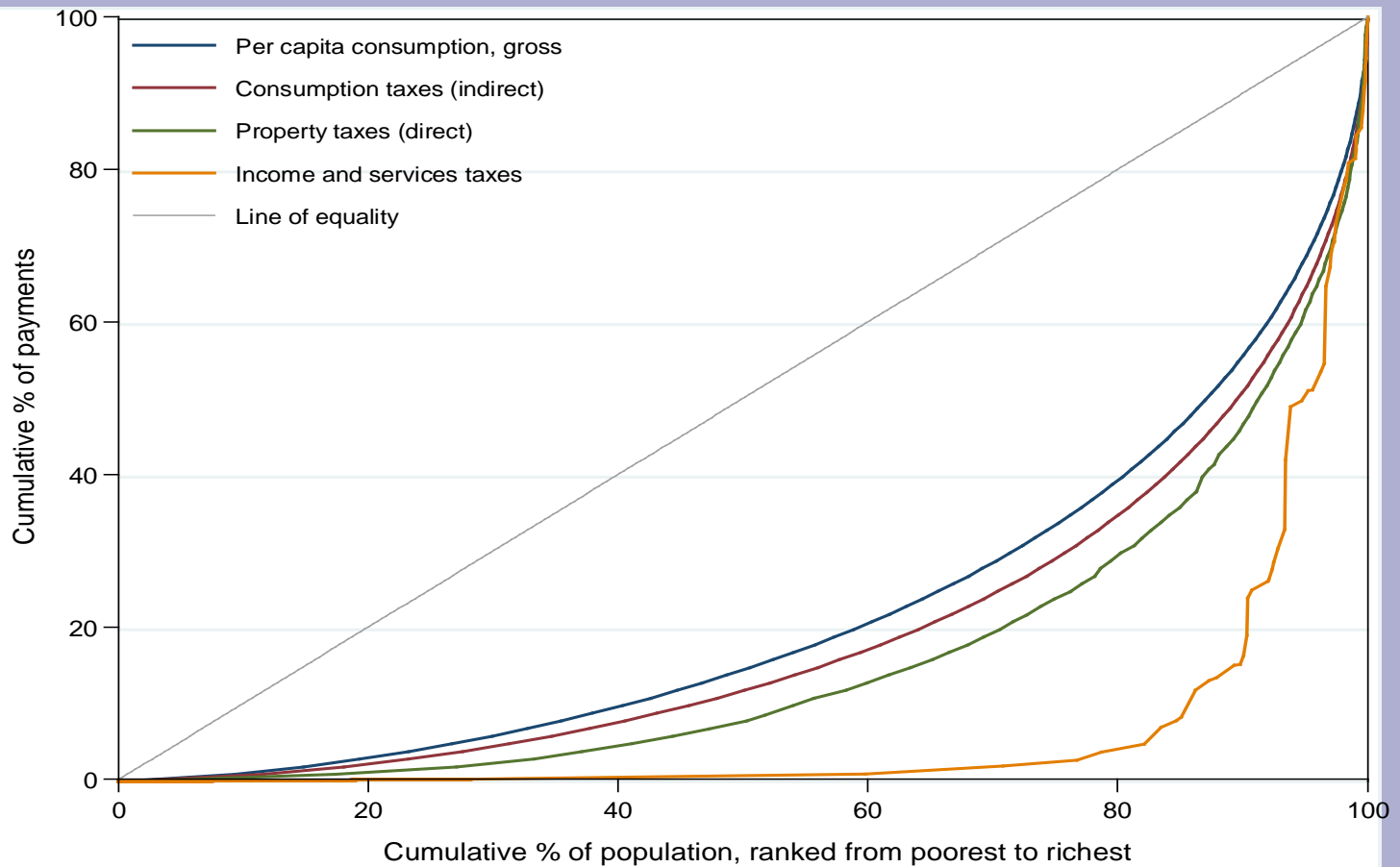
Health payments - consumption and taxes. Brazil, 2003.



Source: Based on data from IBGE (2004a).

# Progressivity in Health Payment

Health payments - consumption and taxes. Brazil, 2008.



Source: Based on data from IBGE (2010).





# Conclusion

There is still significant inequities in health outcomes and health care utilization in Brazil, BUT:

Since the implementation of UHC, there has been gradual and positive changes in health outcomes and health care utilization

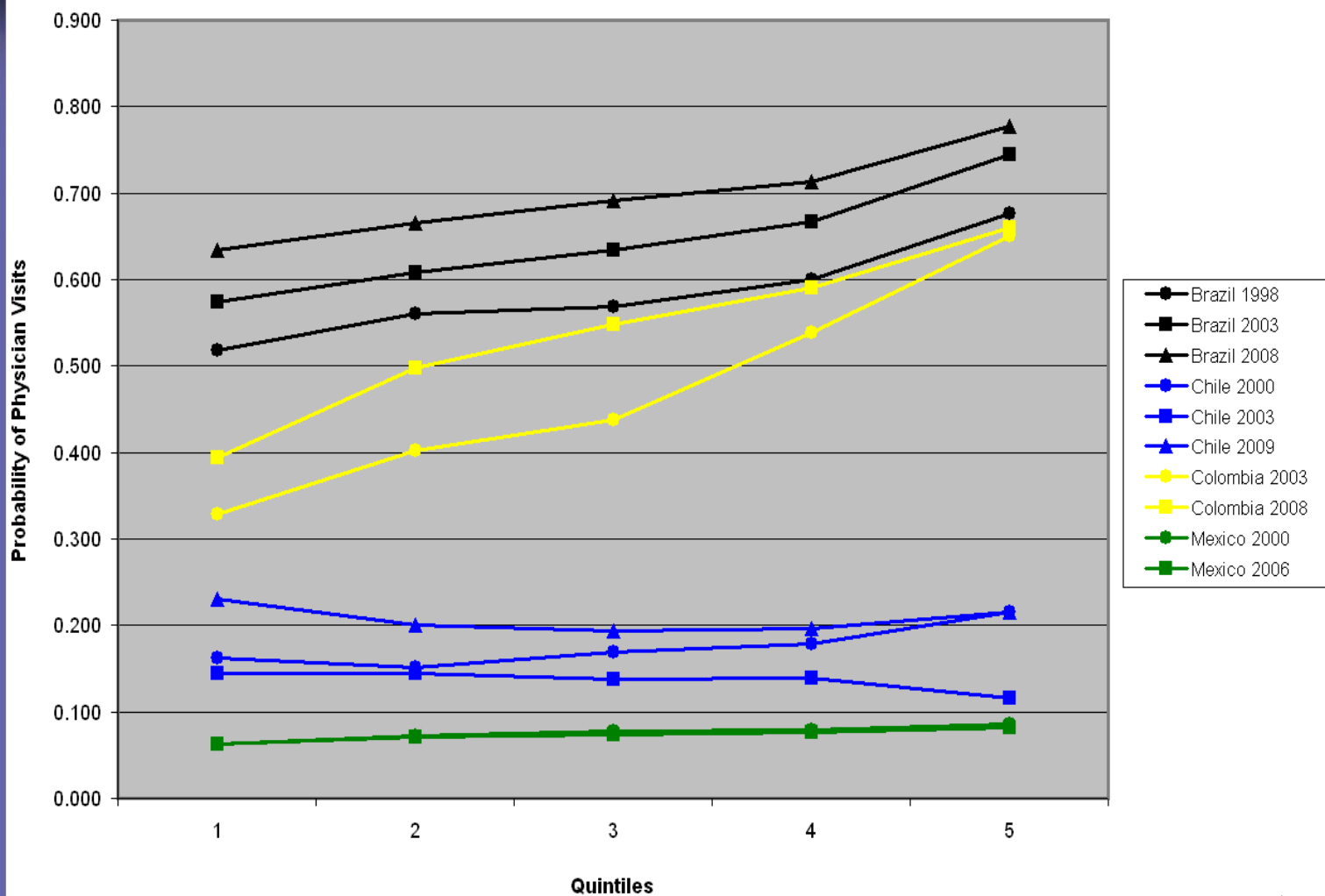
- Growth in preventive health care (pro-rich)
- Reduction in inpatient health care (pro-poor)
- Less socioeconomic inequalities in the use of health care (outpatient and dental health care services)

## Financial protection and progressivity

- Decline in progressivity of total health payments
- Reduction in catastrophic health expenditures

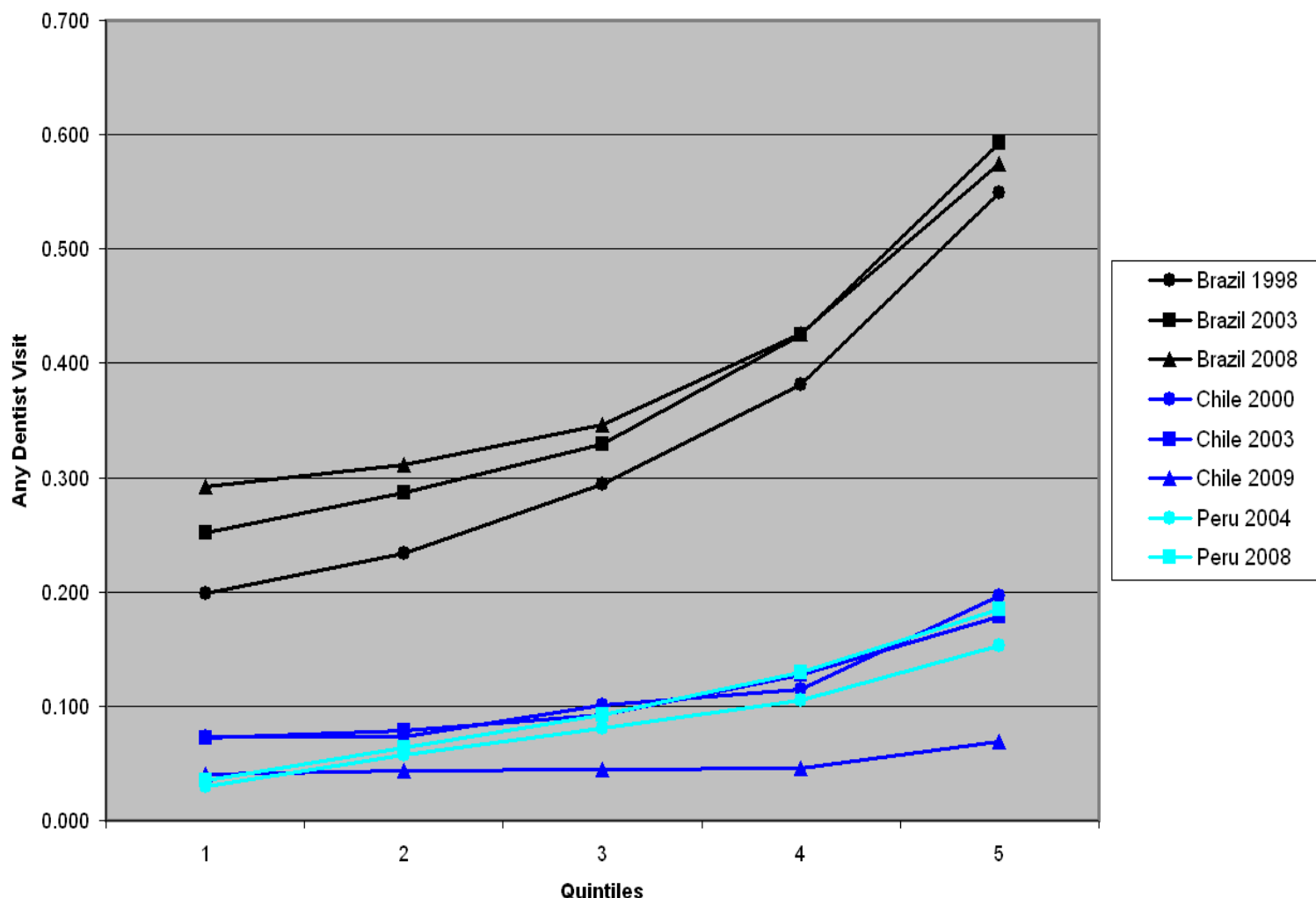
# Comparative Results

Distribution of Probability of Physician Visits by Quintiles



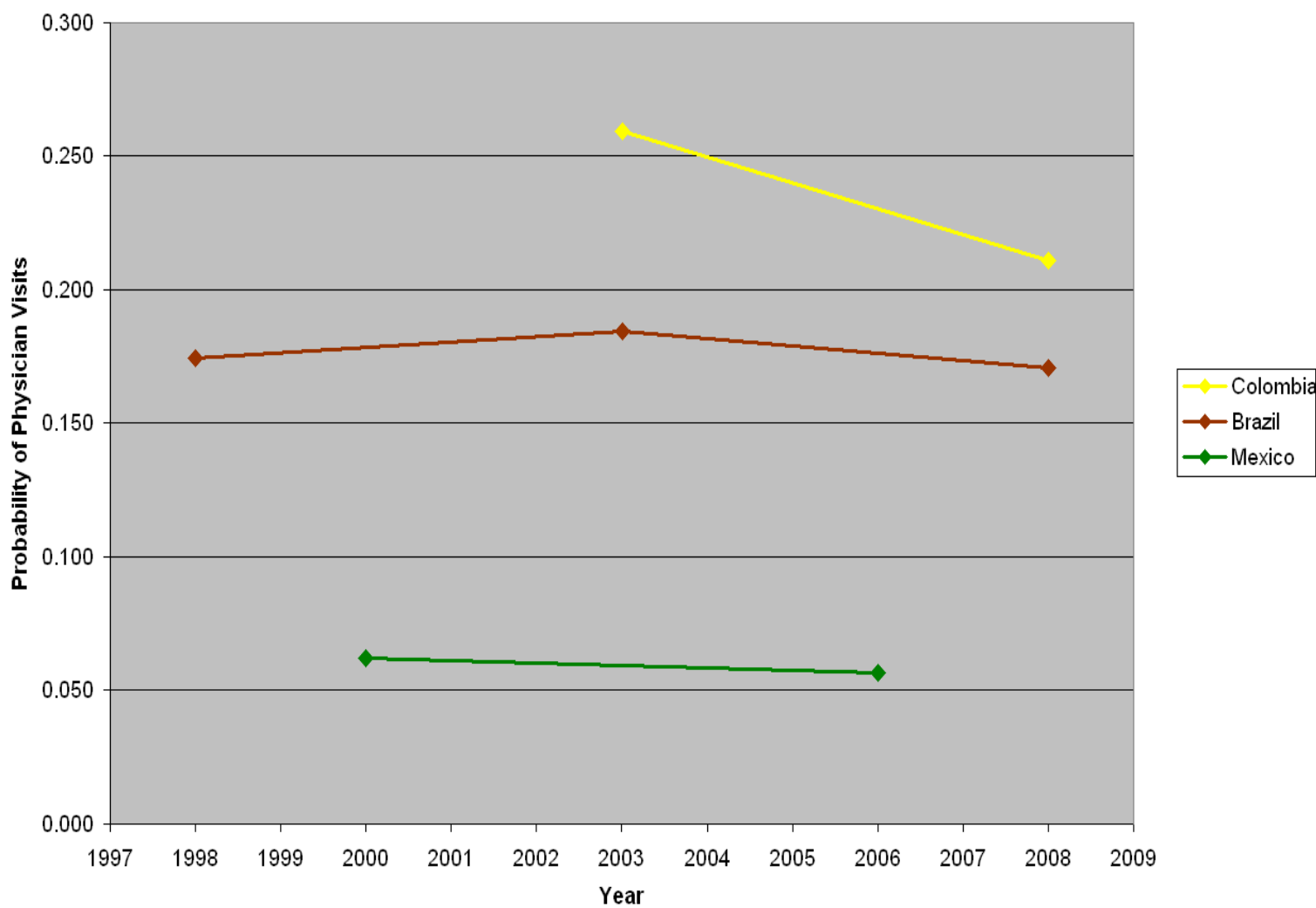
# Comparative Results

Distribution of Probability of Dentist Visits by Quintiles



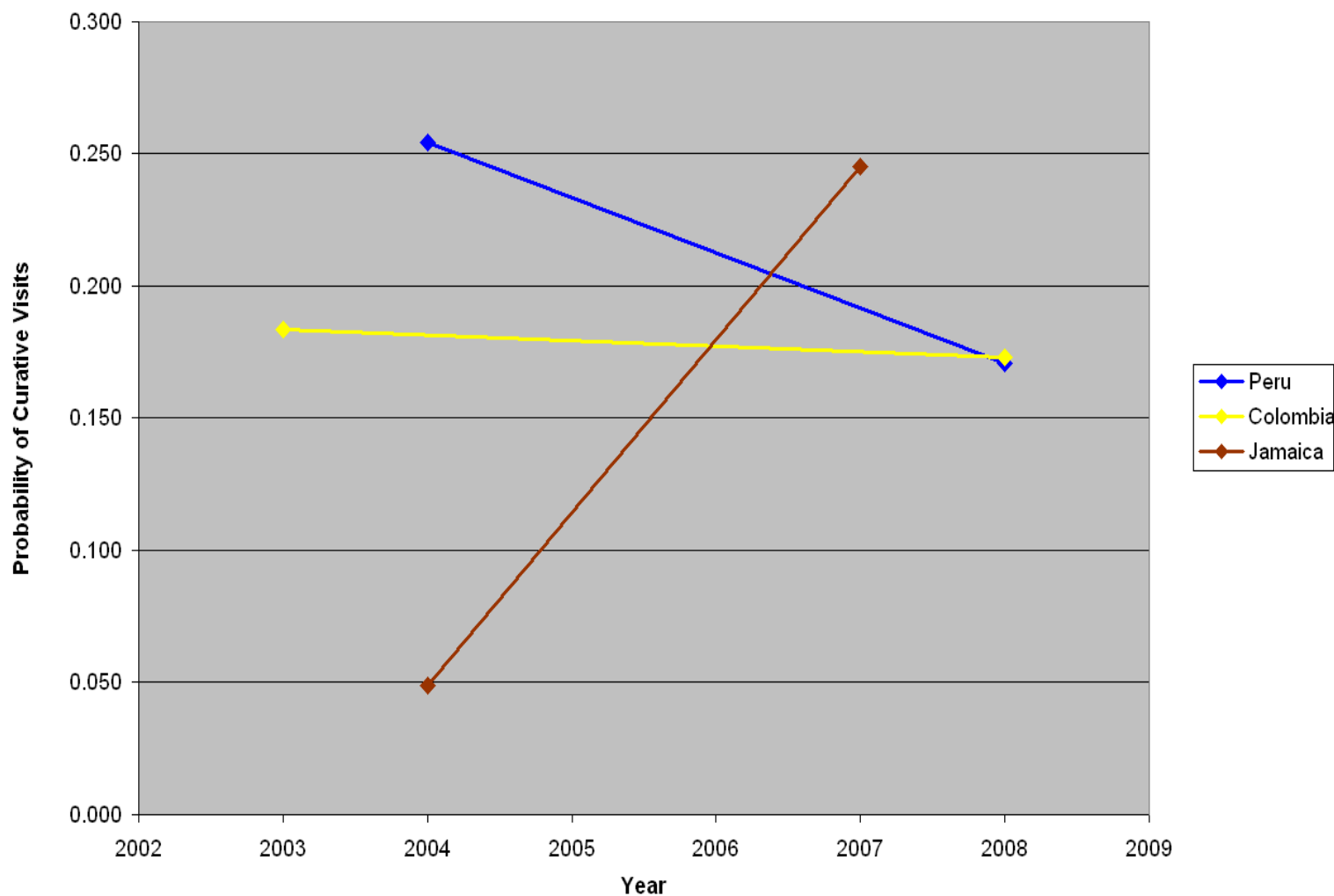
# Comparative Results

Evolution of Horizontal Index for Physician Visits (Prob)



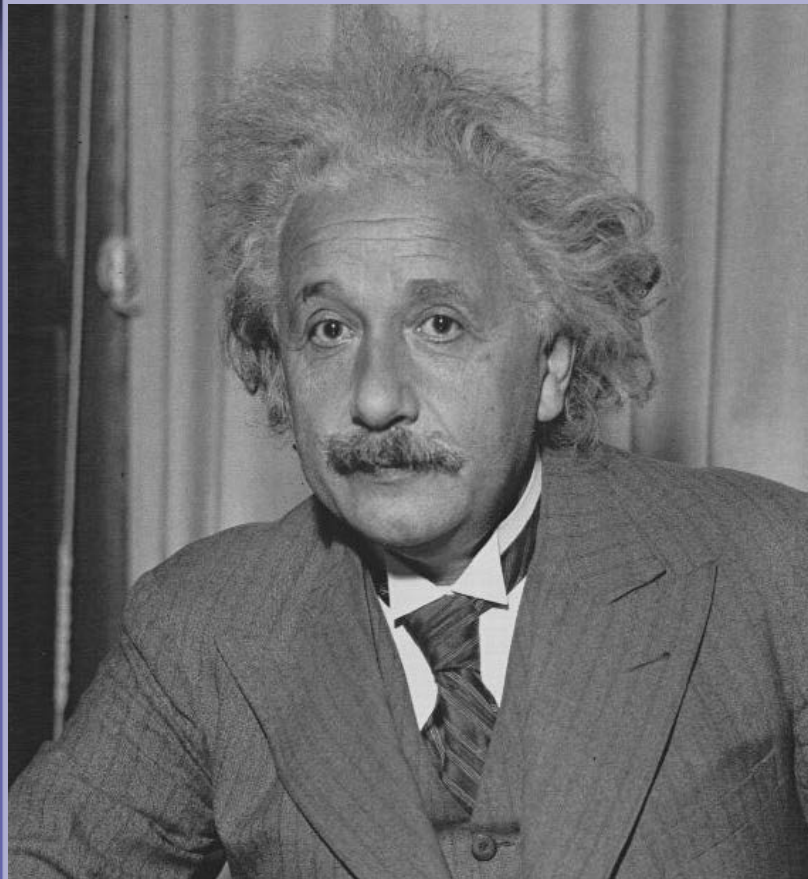
# Comparative Results

Evolution of HI for Curative Visits (Prob)





# EquiLAC



**“In the middle of  
difficulty lies  
opportunity.”**



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